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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/057,523	WHITE ET AL.
Office Action Summary	Examiner	Art Unit	
	MARTIN LERNER	2626	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>28 April 2009</u>.

2a) ☒ This action is **FINAL.**   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
     closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>59, 61 to 66, 68 to 73, 75 to 83</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>59, 61 to 66, 68 to 73, 75 to 83</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a) ☐ All   b) ☐ Some * c) ☐ None of:

       1. ☐ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____.

       3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
          application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
     Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2.   Claims 59, 61 to 66, 68 to 73, and 75 to 83 are rejected under 35 U.S.C. 112,

first paragraph, as failing to comply with the written description requirement. The claims

contain subject matter which was not described in the specification in such a way as to

reasonably convey to one skilled in the relevant art that the inventors, at the time the

application was filed, had possession of the claimed invention.

Independent claims 59, 66, 73, and 81 to 83 set forth the limitations of "wherein

the transceiver is further configured to upload [or, download] an additional control signal

to the local device for directing an additional action in the primary functionality

component" and "uploading, to the local device, an additional control signal for directing

an additional action in the primary functionality component", which limitations involve

new matter. Applicants' Specification as originally filed does not disclose uploading or

downloading "an additional control signal". United States Patent Application Publication

US 2002/0072918, corresponding to the current Specification, at ¶[0070], discloses only

that, in one embodiment, keywords for a grammar can be downloaded from a remote

system, so that keywords already existing in a local device can be replaced,

supplemented, or updated as desired, and at ¶[0071], that prerecorded messages can be downloaded. However, keywords or pre-recorded messages are not an additional control signal set or a device control signal set. Keywords only represent words for a grammar that a speech recognizer can act upon, but control signals represent the electronic sequences that are transmitted once the keywords are recognized for implementing an action. Similarly, pre-recorded messages only represent speech output, which is something different than the electronic sequences of control signals to control a primary functionality component. The Specification, at ¶[0073], does say that data received from a remote system can include control signals, but these control signals are not disclosed to be uploaded or downloaded to a local device, but are only disclosed to control a primary functionality component from a remote location. Applicants' Specification, as originally filed, discloses downloading keywords for a grammar at ¶[0070], downloading pre-recorded messages at ¶[0071], and, more generally, downloading data at ¶[0014], but does not expressly say that downloading includes control signals. It is maintained that one having ordinary skill in the art would understand that downloading keywords for a grammar or pre-recorded messages is something different than downloading a control signal for directing an additional action. Thus, the limitations involve new matter.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4.   Claims 59, 61 to 63, 65 to 66, 68 to 70, 72 to 73, 75 to 77, and 79 to 83 are

rejected under 35 U.S.C. 102(a) as being anticipated by *Houser et al.*

Regarding independent claims 59 and 81 to 83, *Houser et al.* discloses an

information system and terminal or subscriber unit ("a local device") having a speech

interface, comprising:

"a transceiver configured to receive input from the local device and to transmit

data to the local device to enable the local device to provide the data in an output

response" – head-end installation 125 ("a transceiver") serves as a communication hub,

interfacing to various information providers, and connecting them on a conditional basis

to subscriber locations 120-1, . . . , 120-n ("a local device") (column 9, lines 28 to 33:

Figure 2B); head-end installation 125 includes an RF processor 152 for receiving

reverse path data communication from subscriber locations 120-1, . . . , 120-n ("to

receive input from the local device"); the subscriber request is forwarded from RF

processor 152 to an information request processor 156 which accesses database 154

for requested information, and forwards the requested information to the requesting

subscriber ("to transmit data to the local device") (column 11, lines 32 to 50: Figures 2B

and 2C);

"wherein the transceiver is configured to transmit a control signal to the local

device for directing an action in a primary functionality component of the local device" –

each subscriber terminal 16 may be coupled to one or more devices 162-1, . . . , 162-n

("a primary functionality component of the local device"), which may include televisions, stereo receivers, video cassette recorders (VCRs), compact disc (CD) players, computers, and the like (column 12, lines 4 to 19: Figure 2C); information distribution center 12 supplies or broadcasts this information to terminal unit 16, where the information includes audio, video, text, and electronic program guides (column 5, lines 39 to 50: Figure 1); thus, information distribution center 12 supplies "a control signal" to subscriber units to direct a display of information for an electronic program guide or audio/video programming on a television, VCR, or computer;

"and wherein the transceiver is further configured to upload [or, download] an additional control signal to the local device for directing an additional action in the primary functionality component" – in order to provide spoken control of VCR 162-1 and television 162-2, as well as spoken access to EPG data transmitted from head-end installation 125, second vocabulary data ("an additional control signal") may be downloaded from head-end installation 125; second vocabulary data permits basic television control, as well as control of VCR 162-1 and access to EPG data, permitting a user to use spoken commands to implement basic television control, EPG control, VCR control, and event programming (column 23, lines 38 to 50: Figures 2B and 2C); downloading from a head-end installation to a subscriber unit is equivalent to uploading to a local device.

"a processing module coupled to the transceiver and operable to perform speech recognition on the received input" – terminal unit 16 includes a processor ("a processing module") for executing a speech recognition algorithm for comparing vocabulary data

and spoken command data to recognize commands for controlling device 18 or

commands for accessing information transmitted by information distribution center 12

(column 5, lines 60 to 67: Figure 1); terminal unit 16 including speech recognition

processor is "coupled to" head-end installation 125 ("the transceiver") through

distribution network 138 (column 10, line 65 to column 11, line 6: Figures 2B and 2C).

Regarding independent claims 66 and 73, *Houser et al.* discloses an information

method and computer program product having a speech interface, comprising:

"receiving an audio input from a local device, the audio input based on speech

input" – microphone 320 receives a sound signal, and transmits a digitized sound signal

to subscriber terminal 160 ("a local device") and speech recognition software compares

spoken sound data with phonemic or template vocabulary data (column 15, line 64 to

column 16, line 24: Figure 5);

"performing speech recognition on the received audio input" – terminal unit 16

includes a processor for executing a speech recognition algorithm for comparing

vocabulary data and spoken command data to recognize commands for controlling

device 18 or commands for accessing information transmitted by information distribution

center 12 (column 5, lines 60 to 67: Figure 1);

"transmitting data to the local device to enable the local device to provide the

data in an output response to the user" – head-end installation 125 serves as a

communication hub, interfacing to various information providers, and connecting them

on a conditional basis to subscriber locations 120-1, . . . , 120-n ("the local device")

(column 9, lines 28 to 33: Figure 2B); head-end installation 125 includes an RF

processor 152 for receiving reverse path data communication from subscriber locations

120-1, . . . , 120-n; the subscriber request is forwarded from RF processor 152 to an

information request processor 156 which accesses database 154 for requested

information, and forwards the requested information to the requesting subscriber

("transmitting data to the local device") (column 11, lines 32 to 50: Figures 2B and 2C);

"transmitting a control signal to the local device for directing an action in a

primary functionality component of the local device" – each subscriber terminal 16 may

be coupled to one or more devices 162-1, . . . , 162-n ("a primary functionality

component of the local device"), which may include televisions, stereo receivers, video

cassette recorders (VCRs), compact disc (CD) players, computers, and the like (column

12, lines 4 to 19: Figure 2C); information distribution center 12 supplies or broadcasts

this information to terminal unit 16, where the information includes audio, video, text,

and electronic program guides (column 5, lines 39 to 50: Figure 1); thus, information

distribution center 12 supplies "a control signal" to subscriber units to direct a display of

information for an electronic program guide or audio/video programming on television,

VCR, or computer;

"uploading, to the local device, an additional control signal for directing an

additional action in the primary functionality component" – in order to provide spoken

control of VCR 162-1 and television 162-2, as well as spoken access to EPG data

transmitted from head-end installation 125, second vocabulary data ("an additional

control signal") may be downloaded from head-end installation 125; second vocabulary

data permits basic television control, as well as control of VCR 162-1 and access to

EPG data, permitting a user to use spoken commands to implement basic television

control, EPG control, VCR control, and event programming (column 23, lines 38 to 50:

Figures 2B and 2C); downloading from a head-end installation to a subscriber unit is

equivalent to uploading to a local device.

Regarding independent claim 66, *Houser et al.* further discloses receiving an

audio input from a local device "over a network", transmitting the data "over the

network" and uploading to the local device "over the network" because each subscriber

unit includes a terminal unit 16 that receives speech that is passed via a communication

link (*e.g.*, an infrared link, an RF link, *etc.*) to control device 18 (column 7, lines 42 to 60:

Figure 1), and each subscriber unit 120-1, . . ., 120-n is connected to head-end

installation 125 via a satellite link, RF link, *etc.* (column 9, lines 27to 47: Figure 2B).

Regarding claims 61 to 63, 68 to 70, and 75 to 77, *Houser et al.* discloses

information distribution system 12 supplies or broadcasts information to a terminal unit

16, where "information" includes, but is not limited to, analog video, analog audio, digital

video, digital audio, text services, such as news articles, sports scores, stock market

quotations, weather reports, electronic messages, electronic program guides, database

information, and software including game programs (column 5, line 39 to column 6, Line

14: Figure 1).

Regarding claims 65, 72, and 79, *Houser et al.* discloses that information is retrieved from an information distribution center 12 in response to commands from terminal unit 16 for accessing information transmitted by information distribution center 12 (column 5, line 39 to column 6, line 14: Figure 1); additionally, electronic programming guide (EPG) data is accessed from an information provider 114-3, including television schedule information arranged by time and channel, and transmitted to subscriber units (column 22, line 19 to 51: Figure 2C).

Regarding claim 80, *Houser et al.* discloses that second vocabulary data may be downloaded from head-end installation 125, where the second vocabulary data permits a user to use spoken controls to implement basic television control, as well as control of VCR 162-2 and access to EPG data; second vocabulary permits a user to use spoken controls to implement basic television control, EPG control, VCR control, and event programming (column 23, lines 38 to 50: Figure 2C); the second vocabulary includes the vocabulary of Table I above and additional vocabulary of Table II below (column 24, lines 1 to 34); thus, the second vocabulary provides controls a VCR and an EPG that are at least "supplementing" to the first vocabulary of Table I.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 64, 71, and 78 are rejected under 35 U.S.C. 103(a) as being

unpatentable over *Houser et al.* in view of *Hughes et al.*

        Concerning claims 64, 71, and 78, *Houser et al.* omits the limitation of "wherein

the input received from the local device is not capable of being processed by the local

device." That is, *Houser et al.* discloses that subscriber unit 120 has a terminal unit 16

that performs speech recognition, instead of performing the function of speech

recognition remotely. (Column 7, Lines 42 to 50) However, it is well known that speech

recognition functionality may be distributed to be performed either locally or remotely.

Specifically, *Hughes et al.* teaches a voice processing system where a caller is calling

from a telephone ("the local device"), and a speech recognition function is performed

only at a trunk adapter 180 or at a DVT server 420 or 435. (Column 1, Lines 8 to 25:

Figures 1 and 2) Implicitly, a caller's telephone is not capable of processing a caller's

voice input by speech recognition when the speech recognition function is only

performed at the server. An advantage of hiding the location of the voice recognition

resource from the application is that it provides the application designer with much more

flexibility and portability, since the same application can easily be used with different

recognition systems. (Column 3, Lines 22 to 34) It would have been obvious to one

having ordinary skill in the art to provide a speech recognition resource that is only

performed at a server but is not capable of being performed by the local device as

taught by *Hughes et al.* in an information system having a speech interface of *Houser et*

al. for a purpose of providing an application designer with more flexibility and portability.

Response to Arguments

7.   Applicants' arguments filed 28 April 2009 have been fully considered but they are
not persuasive.

Firstly, Applicants argue that the independent claims, as amended, meet the
requirements of 35 U.S.C. §112, 1st ¶. Applicants say that ¶[0073] of the Specification
states that data received from the remote system can include control signals for
controlling a primary functionality component. Applicants traverse the position set forth
by the rejection that the disclosure is limited to controlling a primary functionality
component, but not to downloading control signals. Applicants contend that the
"position is inconsistent with any reasonable reading of paragraph [0073], which
describes the transfer of 'speech and other data to and from the local device.'" This
argument is not persuasive.

Those skilled in the art would know that transmitting a control signal for
purposes of controlling a primary functionality component is not the same thing as
downloading or uploading an additional control signal for directing an additional action in
the primary functionality component. It is not agreed that the position set forth by the
rejection is "inconsistent with any reasonable reading" of Applicants' Specification. A
reasonable reading of the Specification, at ¶[0073], says, that in response to a spoken
command, the remote system 12 recognizes the command and returns a single control
signal corresponding to the command so as to control the primary functionality
component at the local device. This is different from downloading or uploading a new
control signal to give the local device additional functionality that it did not have before.

Downloading a new control signal is similar to downloading a new computer program
that provides a new capability to a computer into which the program is downloaded.
This is plainly different from merely receiving signals at the computer from a remote
location to change what is being displayed on a screen of the computer.

Secondly, Applicants argue that the rejection under 35 U.S.C. §103(a) is
improper because the prior art does not disclose the limitation of "wherein the
transceiver is further configured to upload an additional control signal to the local device
for directing an additional action in the primary functionality component." Applicants say
that *Houser et al.* is directed to a second vocabulary which "permits a user to use
spoken commands to implement basic television control, EPG control, VCR control, and
event programming." Applicants then say that a user of *Houser et al.* is thereby
permitted access to speak commands that they could not speak previously, but only for
the purpose of implementing "basic" controls (i.e., existing control signals). Moreover,
Applicants allege that *Houser et al.* says nothing about uploading a control signal, but
only describes a way by which existing control signals may be invoked by a user using
downloaded vocabulary. These arguments are not persuasive.

Preliminarily, it is noted that Applicants have amended their independent claims
59, 66, 73, and 81 to 83 to delete the limitations of a communication module that is
"operable to detect an additional input from the local device, and in response, to cause
the local device to cease providing the output response". This limitation, which is
conventionally known as a "barge-in" feature, was the reason that *Hughes et al.* was
applied to the rejection under 35 U.S.C. §103(a). Because that limitation is now

deleted, *Hughes et al.* is no longer required to reject these independent claims.

Accordingly, independent claims 59, 66, 73, and 81 to 83 are rejected as being

anticipated by *Houser et al.* under 35 U.S.C. §102(a), as necessitated by amendment.

Now, Applicants are plainly misreading the disclosure of *Houser et al.* at Column

23, Lines 47 to 50, as limited only to "basic" controls. Looking at the entire passage, it

should be pretty clear to any fair-minded person that the second vocabulary permits not

only "basic" controls, but, additionally, EPG control, VCR control, and event

programming. (Column 23, Lines 38 to 50) Simply comparing the first vocabulary of

"basic" controls disclosed by *Houser et al.* in Table I (Column 18, Lines 27 to 60) to the

second vocabulary of controls at Table II (Column 24, Lines 1 to 34), one can see that

there is additional functionality provided by the second vocabulary of Table II. *Houser*

et al. clearly states: "An additional, but non-limiting, vocabulary suitable for

implementing this control includes the vocabulary of Table I above and the additional

vocabulary of Table II below." (Column 24, Lines 1 to 3) One can readily see that

Table II includes commands for controlling a VCR and an electronic programming guide

(EPF), but that Table I only includes commands for turning on a television and selecting

a channel. Thus, *Houser et al.* is certainly disclosing that the commands for the second

vocabulary includes all of the "basic" commands of Table I, and additional commands

for controlling a VCR, an EPG, and event programming of Table II. Similarly, *Houser et*

al. discloses at Column 18, Lines 1 to 13, that a first service fee only gets a subscriber

basic spoken commands for controlling a television, but a second service fee earns the

subscriber more sophisticated vocabulary data for implementing extended spoken controls of the television, as well as control of a VCR, stereo, game player, etc.

Moreover, it is maintained that Applicants' argument directed to the rejection under 35 U.S.C. §103(a) is inconsistent with the interpretation by which Applicants traverse the rejection under 35 U.S.C. §112, 1st ¶. Applicants are making a distinction between a control signal and a vocabulary, but the point of the new matter rejection is that only a vocabulary is disclosed to be downloaded by the Specification, and not the control signals. The standard for an adequate written description is not the same as the standard for obviousness. Applicants' Specification should disclose a feature before Applicants are entitled to claim the feature. Still, *Houser et al.* provides a substantial disclosure that the second downloaded vocabulary is 'suitable for implementing the controls', whereas Applicants' Specification at ¶[0070] only discloses that keywords for a grammar can be downloaded. It is conceivable, then, that Applicants' new, downloaded keywords for the grammar could have nothing to do with controlling the primary functionality component, but only relate to an acceptable syntax for requests to the remote system. However, *Houser et al.* teaches that the vocabulary is suitable for implementing controls, and gives examples of new functionality provided to "control" an electronic program guide or a VCR.

Therefore, the rejections of claims 59, 61 to 66, 68 to 73, and 75 to 83 under 35 U.S.C. §112 1st ¶, as setting forth new matter; of claims 59, 61 to 63, 65 to 66, 68 to 70, 72 to 73, 75 to 77, and 79 to 83 as being anticipated under 35 U.S.C. §102(a) by

Houser et al.; and of claims 64, 71, and 78, as being obvious under 35 U.S.C. §103(a)

as being obvious over *Houser et al.* in view of *Hughes et al.*, are proper.

Conclusion

8.   Applicants' amendment necessitated the new grounds of rejection presented in

this Office Action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP

§ 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

        A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

        Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Martin Lerner whose telephone number is (571) 272-

7608. The examiner can normally be reached on 8:30 AM to 6:00 PM Monday to

Thursday.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David R. Hudspeth can be reached on (571) 272-7843. The fax phone

number for the organization where this application or proceeding is assigned is 571-
273-8300.

Information regarding the status of an application may be obtained from the
Patent Application Information Retrieval (PAIR) system. Status information for
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system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Martin Lerner/
Primary Examiner
Art Unit 2626
June 3, 2009